

County of Loudoun
Department of Planning
MEMORANDUM

DATE: November 15, 2006

TO: Jeffrey A. Nein, Cooley Godward LLP

FROM: Stephen Gardner S.G. .
Project Manager

RE: **ZMAP 2006-0011 & ZCPA 2006-0003; Stone Ridge Commercial**
1st Referral Comments, Summary of Outstanding Issues

Office of Transportation Services

- The application proposes to realign existing Gum Spring Road to create a T-intersection with a local road (Canary Grass Drive) approximately 300 feet south of the existing Gum Spring Road/Route 50 intersection, and proposes to remove the existing traffic signal and median crossover at the intersection of existing Gum Spring Road and Route 50, creating a right-in, right-out scenario to/from eastbound Route 50. This proposed right-in, right-out configuration is not acceptable as it is inconsistent with the adopted Revised Countywide Transportation Plan (Revised CTP), which calls for the ultimate condition of this segment of Route 50 to be limited access with grade separated interchanges at various locations, including the West Spine Road (approximately 1,000 feet to the east of the proposed right-in, right-out movement). The proposed right-in, right-out movement is not only inconsistent with the limited access policy but would also result in weave/merge conflicts with the future Route 50/West Spine Road interchange. A more acceptable configuration would be to extend Canary Grass Drive to tie into the east-west road (Southpoint Boulevard) approved as part of the adjacent Gum Spring Village Center development, with future access to the West Spine Road south of Route 50. The Applicant should coordinate this connection with Gum Spring Village Center.
- Issues with right-of-way acquisition and construction of the proposed West Spine Road between Tall Cedars Parkway and Route 50 add additional complications and uncertainty to the interim and ultimate roadway configuration in this area. Although construction plans for a two-lane (northbound) section of the West Spine Road between Tall Cedars Parkway and Route 50 were approved by the County in 2002 (CPAP 2001-0184), no construction has commenced to date. No plans are currently on file for the remaining two (southbound) lanes of the West

Spine Road between Route 50 and Tall Cedars Parkway. (Construction plans (CPAP-2002-0189) were approved by the County in 2004 for a four-lane section of Gum Spring Road from Tall Cedars Parkway south to Braddock Road, but no construction has commenced to date). It has been anticipated that existing Gum Spring Road and the West Spine Road would operate as a one-way pair of roads until all four lanes of the West Spine Road are completed between Tall Cedars and Route 50, but such a configuration has not been approved by VDOT. All approved construction plans show cul-de-sacs at both ends of the segment of existing Gum Spring Road between Tall Cedars Parkway and Route 50 (as envisioned by the currently-approved Stone Ridge development program and the approved Gum Spring Village Center special exception (SPEX 2003-0033, approved in 2004). Based on the anticipated cul-de-sacs at each end of this segment of Gum Spring Road, Gum Spring Village Center (as required by its SPEX condition of approval) has prepared and submitted to the County a traffic signal warrant study for its Southpoint Boulevard entrance onto Gum Spring Road, approximately 600 feet south of Route 50. The study finds that a traffic signal is not warranted at the proposed intersection. Given the situation with the West Spine Road and the likelihood that existing Gum Spring Road will remain open in its current condition for the foreseeable future, OTS strongly disagrees with this conclusion. Additional discussion and coordination on this matter and the overall status of the West Spine Road are necessary.

- While the Applicant's traffic study indicates that the existing Gum Spring Road/Route 50 signalized intersection operates at LOS E during the AM peak hour, other traffic studies recently submitted to the County (e.g., Arcola Center) indicate that the intersection operates at LOS F during both the AM and PM peak hours. An explanation/clarification of this discrepancy needs to be provided.
- Proffered improvements to Route 50 committed to as part of the previous Stone Ridge rezoning (ZMAP 2002-0013) should also be included with this proposal as "up front" improvements as the current application is also part of Stone Ridge and would add trips to the Route 50 corridor. These proffers include "up front" construction of the third eastbound lane of Route 50, roughly from Stone Ridge to Loudoun County Parkway (as described in ZMAP 2002-0013, Proffer II.B.3., November 30, 2005 Letter of Clarification), and improvements to the West Spine Road/Route 50 intersection (as described in ZMAP 2002-0013, Proffer II.B.4.(c), October 5, 2005 Proffer Statement).
- Given existing and forecasted traffic volumes, grade-separated interchanges are an integral part to long-term transportation solutions in the Route 50 Corridor. Currently, a diamond interchange is envisioned at intersection of the West Spine Road and Route 50. The Applicant should provide a fair-share contribution towards this future improvement.
- Staff has no issues with proposed re-alignment of Millstream Drive, provided that the future east-west segment intersects with Route 659 Relocated at a point

sufficiently south of the planned interchange of Route 659 Relocated and Route 50.

- The inclusion of 307 additional residential units as part of this application appears to be a reversal of Board action taken with the previous Stone Ridge rezoning (ZMAP 2002-0013), in which 216 residential units were eliminated and approximately 200,000 sq ft of non-residential uses were instead retained.
- An appropriate transit contribution should be provided for the 307 residential units proposed on site.

Loudoun County Health Department

- All the proposed lots and structures are properly served by public water and public sewer
- All existing wells and drainfields are shown on future plats.
- All existing wells and drainfields are properly abandoned (Health Department permit required) prior to submission of record plat or razing of the structure, which ever is first.

Fire, Rescue, & Emergency Management

- The applicant shall require all builders to provide and install a residential fire sprinkler system for each residential unit constructed; provided that the water supply system to any such residence has sufficient capacity to support the sprinkler system. All model homes utilized by the applicant and/or builder on the property for marketing purposes shall be constructed with a residential sprinkler system. All marketing information packets shall include promotional materials on the benefits of automatic fire sprinkler systems offered by the manufacturer of residential fire sprinkler systems, and United States Fire Administration. All sales agents must be orientated to the benefits of residential sprinkler systems. All *Features* brochures shall include the residential sprinkler system and shall be printed in a fashion (i.e. double font size, italics, bold, etc.) to attract the buyer/reader's attention, as proof from the builder they are committed to providing a product with the safety and welfare of the purchaser in mind.
- The applicant shall contribute an initial base sum of money of \$250.00 per unit for each residential unit, and an initial base sum of \$0.20 per gross square foot, per story of non-residential buildings, and shall escalate in accordance with the CPI beginning with the base year 1988. The initial contribution shall be payable to the County of Loudoun at the time of issuance of the zoning permit. For the purpose of this section a residential unit includes each single-family detached unit, each single-family attached unit, and each multi-family unit. Said

contributions shall be divided equally between the primary serving fire and rescue services. The County shall pay the collected proceeds to the primary serving fire company and the primary serving rescue company. In the event that a volunteer company is not the primary provider of fire and/or rescue service, the aforementioned contributions shall be discontinued on a basis of 50% for the primary fire service provider and 50% for the primary rescue service provider.

- Applicant shall provide all weather gravel compacted access for emergency vehicles to those portions of the project which are under construction, not later than the framing stage of construction, subject to approval of the Fire Marshall's office.
- Access to alternative water sources or dry hydrants shall be provided to Loudoun County Fire and Rescue wherever impounded water is available on the site, in order to provide additional possible water sources for department use in the event of emergencies.

Building and Development, ERT

- As shown on Sheet 3, Landbay 7 and a portion of Landbay DD-1 north of Millstream Drive do not depict any swm features. Please depict the approximate location, estimated size, and type(s) of facilities consistent with Section K.4 of the Rezoning Checklist.
- ERT recommends several measures for the existing pond south of Millstream Drive, in order to minimize future maintenance expense, improve its water quality benefit, and enhance its visual appeal:
 1. The pond does not include sediment forebays. Forebays are a minimum design standard for swm ponds that provide preventive maintenance. Therefore, staff recommends that forebays be installed at all current and future stormwater pipe outfalls.
 2. The existing embankment is rutted on top from frequent vehicle use, and the side slopes have not been mowed for a long time. Ruts that collect rainwater encourage seepage into the pond embankment that can compromise structural stability, while infrequent mowing encourages woody plant growth that also compromises stability. Staff encourages the applicant to promptly address proper facility maintenance.
 3. Staff encourages establishing a forested buffer along the side slopes of the existing pond (except for the embankment side slopes and near any new sediment forebays), consistent with Section 7.304 of the Facility Standards Manual. Viable buffers along the embankment enhance green infrastructure, provide a visual buffer between the uses on either side of the pond, and can compensate for some of the existing stream buffer that will likely drown from inundation within the pond basin.

- The Forest, Trees, and Vegetation Policies of the Revised General Plan encourage the preservation of existing vegetation (Page 5-32). During sites visits conducted on October 5, 2006 and October 17, 2006, staff identified several healthy mature white oak trees located on the north side of the cleared area that correspond with the alignment of proposed Canary Grass Drive, between Land Bays FF1 and FF2. The land disturbance that has already occurred has not impacted the critical root zone (CRZ) for the majority of these trees. As such, staff recommends that trees occurring along the north side of the road alignment be identified within a tree conservation area on the concept development plan (CDP). The tree conservation area should include a suitable width to avoid impacting the CRZ of the mature oak trees. For healthy trees with a diameter breast height greater than or equal to 6 inches that are damaged during construction, staff further recommends that the application commit to replacing a damaged tree with two 2.5 to 3-inch caliper native deciduous trees.